

# Alternatives and Justification Analyses Guide

## Industrial Developments

### 1.0 Introduction

One of the goals of the Office of Coastal Management (OCM) is to achieve a balance between conservation of coastal resources and development of the coastal zone. Development in the coastal zone is encouraged but avoidance of unnecessary impacts to coastal resources is essential in order to protect those resources for future generations. To accomplish this goal, OCM reviews every Coastal Use Permit (CUP) application with the objective of avoiding and/or minimizing adverse impacts wherever possible. Pursuant to La. RS 49:214.27.B and C., OCM uses the Coastal Use Guidelines, found in LAC Title 43, Part I, Chapter 7, Subpart B, §701-719, to determine the type of information needed to fully evaluate a particular use and the adverse impacts that must be avoided to the maximum extent practicable. All coastal uses must be in conformance with all applicable Coastal Use Guidelines in order to receive approval from OCM.

Part of these guidelines, §701.H, charges OCM with ensuring that the public benefits of a proposed coastal use clearly outweigh any adverse impacts to public resources resulting from that use. **Public benefits** include providing goods and/or services to users that currently do not have reasonable access to such goods and/or services, increasing permanent employment opportunities and increasing public revenues. **Coastal resources** include coastal waters, wetlands, fisheries, wildlife and unique ecological/coastal features such as ridges, cheniers, salt domes, reefs, beaches and dunes. These resources provide value to the public in the form of storm and flood protection, nursery grounds for commercial and recreational fishing, critical habitat for endangered species and improved water quality. Public resources also include existing structures and infrastructure. **Adverse impacts** are direct or indirect loss and/or negative alteration of a public resource as well as negative impact on concurrent and neighboring coastal users and include such things as increased intensity or frequency of flooding, accelerated erosion and salt water intrusion.

Review of a proposed coastal use using the Coastal Use Guidelines includes asking questions such as:

1. Can adverse impacts from a proposed use on coastal resources and/or user groups be avoided by moving the use to an area which results in less adverse impact to coastal resources and/or users?
2. If the use cannot be moved, can demand for the proposed goods and/or services in the area to which they will be introduced be documented?
3. If a use cannot be moved and demand can be demonstrated, can the use be redesigned/reconfigured, or can different methods be used to accomplish the use, which results in less damage to coastal resources?

To answer these questions, OCM requires that the applicant provide Alternatives and Justification Analyses in sufficient detail to demonstrate a thorough consideration of the respective subjects. In an effort to recognize the differences between small and large projects,

and/or low and high coastal resource impact projects, OCM has developed a tiered approach to Analysis development. Factors such as, but not limited to, the complexity of the development, surrounding land use, type and level of resource impact and coastal use objective(s) are used to determine the range of alternatives to be considered in the Alternatives Analysis and the information and level of detail required for the Justification Analysis. This guide was developed to assist applicants for Coastal Use Permits with determining, in general, the type of information and level of detail needed to fully evaluate a proposed coastal use's potential impacts and benefits and therefore it's conformance with the Coastal Use Guidelines. Any combination of analyses may be required depending on the nature of the proposed coastal use and the potential adverse impacts that may occur from that use.

To fully evaluate a proposed coastal use's benefits and impacts, Alternatives and/or Justification Analyses are required during review of a use from which adverse impacts to coastal resources are, in OCM's opinion, likely to occur. The Alternatives Analysis should address several options for project siting that are compared equally for feasibility and will allow OCM to determine the least damaging feasible site for the proposed use. The Alternatives Analysis should provide documentation that clearly demonstrates that reasonable efforts were made to find less damaging sites and should provide an explanation for why each less damaging site was not feasible. The Alternatives Analysis also should address alternate site configuration, alternate methods of construction, and how adverse impacts to coastal resources will be minimized.

The Justification Analysis should include sufficient detail to clearly demonstrate demand for the proposed use and will allow OCM to determine the public need the proposed use. The Justification Analysis should explain the goods and/or services that the proposed coastal use will provide and include documentation that clearly demonstrates a public demand for, or public benefit resulting from, the proposed use. The analysis should provide enough information for OCM to determine that there is a reasonable chance that the project will be successful and not result in a situation where large scale destruction of resources is permitted for a project that fails economically, floods, causes flooding on adjacent areas or in some other way fails the public.

In general, the greater the resource or user group impacts, the more detail required for both the Alternatives and Justification Analyses. If reviewing this guide prior to submission of a JPA, the information presented herein should be taken into consideration and addressed while developing the project. In most cases, alternatives, or the lack thereof, are evident and a simple discussion of the options considered is sufficient. This information can be provided in steps 11b-c of the Joint Permit Application. If the information is not provided in or attached to the JPA, the OCM permit analyst will review the project and determine if any less damaging alternatives are evident. Additional information may be requested by the permit analyst in order to address the less damaging options he/she identified. Using the information contained in these analyses, OCM can effectively evaluate the proposed coastal use's conformance with the applicable Coastal Use Guidelines (specifically §701.F.3, 5, 7, 8, 10, 13, 16 and 19; §701.G.2 and 6; §701.H; §701.I; and all applicable Use Specific Guidelines).

**Industrial developments** are defined as facilities used to produce goods in connection with, or as part of, a process or system. Such developments include refineries, steel mills, shipyards, fabrication facilities, food processing facilities, bulk loading facilities, landfills, water

treatment systems, etc. These types of developments require Alternatives and Justification Analyses if, in OCM's opinion, adverse impacts to coastal resources are expected occur during construction and/or operation. The complexity of the development, surrounding land use, type and level of resource impact and coastal use objective(s) are used to determine the range of alternatives to be considered in the Alternatives Analysis and the level of detail required for the Justification Analysis.

Other factors that must be identified when developing the Alternatives and Justification Analyses are site description, infrastructure needs (roads, powerlines, sewerage, water, drainage) proximity to needed services (grocery, pharmacy, bank, hospital) and the development's effects on evacuation routes and existing infrastructure. Secondary impacts that may be necessary but fall outside the scope of the proposed development also must be considered as part of the overall development project. **Secondary impacts** include, but are not limited to, the construction of power, water, sewer, cable, internet and telephone lines as well as roads and access channels by which the development will be connected with existing infrastructure. These secondary impacts may be permitted separately, but because they are dependent on the development project and vice versa, the impacts associated with them must be evaluated as part of the whole project.

Because the level of detail required in the Justification-Analysis depends largely on the type and level of surrounding land use and the type and level of coastal resource impacts, **alternative sites should be addressed first**. All feasible sites, as defined below, should be considered and the least damaging site selected as the preferred site. Once the site has been selected, justification of the project should be prepared for that site. Please keep in mind that the type of information and level of detail required for the Justification Analysis, as requested by the OCM Permit Analyst, are dependent on the size of the proposed development, the associated magnitude of the coastal resource impacts and the extent of surrounding land use. These parameters may change depending on the location, scope and configuration of the development ultimately determined to be the least damaging. Please check with your OCM Permit Analyst to determine if the level of detail originally requested still is required.

OCM encourages potential applicants for industrial developments to hold pre-application coordination meetings with the regulatory and resource agencies. These meetings can be used to identify potential alternate sites and outline information that should be included in the Justification Analysis. To arrange a pre-application meeting, please contact our office at [OCMinfo@la.gov](mailto:OCMinfo@la.gov) or 800-267-4019.

## 2.0 Maintenance of Existing Facilities

Maintenance of existing facilities includes repair or replacement of existing buildings, access roads, parking areas, storage areas and staging areas within the existing facility. Please note that in some cases, normal repairs and the rehabilitation, replacement or maintenance of existing structures do not require Coastal Use Permit provided that:

1. the structure or work was lawfully in existence, currently serviceable, and in active use during the year preceding the repair, replacement or maintenance; and
2. the repair or maintenance does not result in an encroachment into a wetland area greater than that of the previous structure or work; and

3. the repair or maintenance does not involve dredge (the removal by excavation or any other means of native material, including soil, sand, mud, clay and semisolid sediment, regardless of whether the material supports or is supporting vegetation, from any lands or water bottoms in the coastal zone of Louisiana) or fill activities; and
4. the repair or maintenance does not result in a structure or facility that is significantly different in magnitude or function from the original.
5. the activity is not located within one-quarter mile of a barrier island; or on a chenier, barrier beach, dune, salt dome or other similar isolated, raised landform.

Maintenance activities that do not qualify for the above exemption will require a Coastal Use Permit and if, in OCM's opinion, have adverse impacts on coastal resources, will require brief Alternatives and Justification Analyses as outlined below. Please note that an exemption determination from OCM is exclusive to OCM and does not relieve the applicant from obtaining other local, state or federal permits, as required by law.

## **2.1 Alternatives Analysis**

OCM recognizes that maintenance activities have a limited range of alternatives therefore the Alternatives Analysis need not address alternate sites. The Analysis instead should address alternate methods or configurations of implementation that minimize adverse impacts to coastal resources to the maximum extent practicable. The Alternatives Analysis should be a brief narrative that includes an explanation of the nature and objectives of the proposed maintenance activity(ies); an identification and discussion of any available feasible options for the proposed activity that minimize adverse impacts to coastal resources; and an explanation of why less damaging feasible options were not selected.

## **2.2 Justification Analysis**

The Justification Analysis should be a narrative that clearly explains the reason(s) for the proposed activity(ies) and the consequences of not implementing the proposed activity(ies).

## **3.0 Expansion of Existing Facilities**

Expansion of existing facilities includes expansion of existing buildings, storage areas, staging areas and parking areas. Expansion activities that, in OCM's opinion, are expected to have adverse impacts on coastal resources will require Alternatives and Justification Analyses as outlined below.

### **3.1 Alternatives Analysis**

OCM recognizes that expansion activities have a limited range of alternatives therefore the Alternatives Analysis need not address alternate sites that are not adjacent to existing facility unless separation from existing facilities is not precluded logistically. The Alternatives Analysis instead should address alternate locations surrounding existing facility property as well as methods or configurations of implementation that minimize adverse impacts to coastal resources to the maximum extent practicable. The Alternatives Analysis should include the following:

1. A narrative explaining the project objective(s) and identifying the proposed features required to meet the objective(s). The narrative also should identify any project objectives or features that may limit the range of alternatives to be considered.
2. A description of each location considered. Include general topography, water/wetland features, habitat type(s) present, if known, and estimate of impact to each.
3. A narrative explaining the reasons for the elimination of each site considered but not selected for development. Please note that the factors used to compare each site should be identified and should be consistent among sites.

### **3.2 Justification Analysis**

The Justification Analysis for facility expansion activities must demonstrate the need for the additional capacity to be provided by the expansion. The Analysis should include a narrative explaining the additional products to be provided by the expansion and the consequences of not implementing the proposed expansion. Supporting documentation may be required depending on the extent of resource impacts.

## **4.0 New Facilities**

New facilities include any proposed feature at a location which currently does not have existing similar or related features. New facilities that, in OCM's opinion, have adverse impacts on coastal resources will require Alternatives and Justification Analyses as outlined below.

### **4.1 Alternatives Analysis**

The goal of an Alternatives Analysis is to find a location for the proposed development which results in the least amount of adverse impact to coastal resources while allowing the project to fulfill its main objective(s). The Alternatives Analysis provides an objective method of performing a fair and thorough consideration of feasible options for the location, construction, operation and maintenance of a proposed coastal use. OCM encourages applicants to utilize areas that avoid or minimize both direct and indirect adverse impacts to coastal resources. If a selected project location, construction, operation or maintenance method may, in OCM's opinion, result in adverse impacts to coastal resources, an Alternatives Analysis will be required.

**Feasible sites** are defined as any available parcel of land within the general vicinity of the proposed site (within same parish/geographic area and/or near preferred features such as existing industrial areas or transportation features) that can support the main objective(s) of the proposed development. Project objective(s), surrounding land use, total project impact, availability of existing infrastructure and type and extent of coastal resource impacts should be considered when selecting feasible alternative sites.

Feasible sites can be identified using current aerial photography. Landowners can be identified through clerk of court records and contacted to determine availability of the land for purchase. Available parcels are considered any parcel that is or can be for sale. If the current

landowner refuses to sell or discuss sale of the parcel, that parcel is considered unavailable (documentation of attempts to acquire unavailable parcels should be preserved for inclusion in the Alternatives Analysis). Local newspapers also provide a source of available real estate offerings. A drive-by search for lots posted for sale in the general development vicinity also can be an effective method of finding available sites. Several websites offer listings of large tracts of land (see “Available Sources” below). Multiple Listing Real Estate Searches (MLS) also can be used to determine the availability of property for development and also can be used to assess the current housing/real estate market in the development area. MLS or other real estate search results provided for site identification purposes must include the parameters used for the search. If no available alternate sites can be identified, documentation demonstrating such (letters of refusal from landowners to sell property (or chronology and summary of attempts), MLS or other real estate searches resulting in no matches - include search parameters and full results; aerial photos showing no available undeveloped land, any other documentation showing an attempt to find less damaging properties) must be provided.

Documentation that clearly demonstrates that each parcel was compared equally and explains why less damaging parcels were eliminated will be required. Documentation that supports the reasons for elimination should be included with the analysis. All alternate sites and the preferred site must be compared using, at a minimum, the factors identified below. If other factors not identified by OCM are used to compare sites, please define those factors and explain how they were used to evaluate each site. Table 1 can be used to determine the minimum range of alternatives and level of detail that should be considered when developing an Alternatives Analysis.

**Table 1** – Determining the Range of Alternatives that should be considered and the level of detail required in the Justification Analysis when proposing a industrial development. Resource Impacts refers to coastal resource impacts as a percentage of total project impact.

Scope of Development	Resource Impacts		
	Low (<10%)	Med (10.01-30%)	High (>30.01%)
Small (less than 5 acres)	Category 1	Category 2	Category 3
Large (5 acres or more)	Category 2/3*	Category 2/3*	Category 3
* If more than 5 acres of resource impact will occur, higher level of detail is required.			

A minimum of three (**Category 1**), four (**Category 2**) or five (**Category 3**) alternate feasible sites must be considered. Each site should be compared using the same parameters and should, at a minimum, include the items listed below.

1. Define the project objective(s) and identify the proposed features required to meet the objective(s). Identify any project objectives that may limit the range of alternatives to be considered.
2. Identify, on a map, the location of each site considered for development. If less than the minimum number of sites, as specified above, have been considered, please explain why and provide documentation demonstrating the efforts made to find alternate sites.
3. Describe each site considered. Include parcel size relative to development size, topography, water/wetland features, habitat type(s) present and amount of impact to

each. If access to the property is limited or unavailable, explain the limitations and provide any information that can be gained about the site using current photography and topographic and habitat maps. Identify any limiting factors and explain how those factors limit development.

4. Identify the availability and capacity of existing infrastructure (roads, utilities, water, sewer, etc.). Describe any new infrastructure required (excluding tie-in from individual units to existing infrastructure)
5. Provide the source of the raw materials to be used and the method(s) and routes of delivery of those raw materials to the proposed facility.
6. Provide the destination(s) of the products to be manufactured and the method(s) and route(s) of delivery of those products.
7. Describe the surrounding land use within one mile of each site considered. Include type and extent of existing use and any planned future uses, if known.
8. Identify the current zoning of the site and indicate if any zoning variances will be required prior to development.
9. Explain how the use will affect existing infrastructure, including evacuation and identify any additional permits required (e. g. DOTD driveway permit). Describe any secondary infrastructure (excluding tie-in from individual units) that may be required to service the development. Include location and/or route of the needed infrastructure and type and extent of impacts associated with installation of that infrastructure.
10. Provide a narrative explaining the reasons for the elimination of each site considered but not selected for development. Please note that the factors used to compare each site should be identified and should be consistent among sites.

Once the least damaging feasible site has been identified, alternate configurations/methods and/or reduction in scope should be considered in an attempt to avoid or minimize adverse impacts to coastal resources on the selected site. Be aware that some parishes and municipalities, depending on the size of the development, require set-asides for green space/park/recreation areas and possibly detention or retention ponds. These requirements for set-asides should be taken into consideration when selecting a site and configuring the development.

## **4.2 Justification Analysis**

Once adverse impacts have been avoided to the maximum extent practicable through the Alternatives Analysis process outlined above, justification for the project at the selected site must be demonstrated. The goal of a Justification Analysis is to ensure that there is a public need and demand for the product(s) to be provided by the development. The below items must be addressed when developing a Justification Analysis for industrial developments. Please note that a market analysis done for other reasons, such as to secure financial backing, can be used as the Justification Analysis if the information outlined below is addressed within

that analysis. Table 2 can be used to determine the level of detail required in the Justification Analysis.

**Table 2** – Determining the level of detail required in the Justification Analysis.

<b>Size of Development</b>	<b>Resource Impact</b> (% of total impact)			<b>Surrounding Land Use</b> <sup>†</sup>
	Low (≤20%)	Med (20.01-70%)	High (>70.01%)	
Small (less than 5 acres)	S	S/M *	M	High (dense residential, commercial and/or industrial)
	S	S/M *	M	Moderate (light residential/commercial, agriculture)
	M	M	C	Low (no development)
Large (5 acres or more)	S	S/M **	M/C **	High
	S/M **	M/C **	M/C **	Moderate
	M/C **	C	C	Low
* If more than 1 acre of resource impact will occur, higher level of detail is required. ** If more than 5 acres of resource impact will occur, higher level of detail is required. † Refers to the type and extent of the uses occurring on lands in the vicinity of the proposed development				

#### 4.2.1 Simple Justification (S)

1. State the objective(s) of the coastal use (what products and/or services will the development provide) and describe or identify on a map the market to which the products and/or service will be provided.
2. Provide a narrative explaining how the proposed development will introduce or enhance the existing availability of products and/or services in the market area. Include in the narrative an explanation of the coastal water dependent nature of the proposed development (i.e. why the development must be located within or near coastal waters), difference in transport time between that offered by the new development compared to that offered by existing facilities and any other information that the applicant feels demonstrates a demand for the products and/or services to be provided. If proposing a multiple-use development, provide data for each different type of use proposed.

#### 4.2.2 Moderate Justification (M)

Provide information for 1-2 above plus:

3. Identify on a map all competitor facilities (those providing the same or similar products and/or services to the same market). Provide a narrative explaining the competitor's location(s) relative to the proposed facility and include any identifiable limitations of each competitor.



4. Provide supply and demand trends over the last 10 years for the proposed products and/or services in the identified market area and provide projections of the same over the next 10 years.

#### **4.2.3 Complex Justification (C)**

Provide information for 1-4 above plus:

5. Provide labor force trend data for the last 10 years in the geographic area of the proposed development.
6. Provide an estimate of the number of permanent new jobs and associated payroll that would be created by the proposed development.

## **5.0 Available Sources**

Real estate information such as sale rates, current housing availability, average price ranges and gross density can be obtained from realtors and/or building associations in the development area. Multiple Listing Searches provide a listing of all available parcels of land that meet criteria specified by the searcher and can be performed by real estate agents and/or online. The search results will provide a picture of the current real estate stock and the demand on that stock as well as assist in identifying the availability of feasible alternatives. Please note that documentation and data gathered for other purposes, such as to obtain financial backing or to attract development partners, that demonstrate the demand or need for the proposed development also can be included as part of the Justification Analysis. The following websites also may be useful sources of information.

### **5.1 Real Estate Data:**

<http://louisianalandsource.com/>  
[http://www.westslopeproperties.com/land\\_sale/?filter=LA](http://www.westslopeproperties.com/land_sale/?filter=LA)  
[http://www.landwatch.com/Louisiana\\_land\\_for\\_sale](http://www.landwatch.com/Louisiana_land_for_sale)  
<http://www.landandfarm.com/>  
<http://www.landsofamerica.com/america/?Search=region>  
<http://www.unitedcountry.com/realestate/search-state/index.htm>  
<http://www.farmlandsearch.com/view.aspx?sc=louisiana&p=0-8-0>  
<http://www.wredcoland.com/Default>  
<http://www.ldaf.state.la.us/portal/News/MarketBulletinCurrent/tabid/165/Default.aspx>

### **5.2 Population Data:**

<http://www.huduser.org/portal/datasets/socds.html>  
<http://www.reis.com/index.cfm>  
<http://www.census.gov/econ/census07/>  
[http://www.bls.gov/cew/map\\_application.htm](http://www.bls.gov/cew/map_application.htm)